Mr. Martin Moeller
Angelcrest, Inc.
104 Roosevelt Road
Valparaiso, Indiana 46383

Re: Exempt Construction and Operation Status,
127-11550-00092

Dear Mr. Moeller:

The application from Angelcrest, Inc., received on November 12, 1999, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following emission unit, to be located at 104 Roosevelt Road, Valparaiso, Indiana, is classified as exempt from air pollution permit requirements:

(a) One (1) crematory incinerator for human remains, maximum capacity of 100 pounds per hour, supplemented by natural gas fuel at a rate of 1.7 million British Thermal units per hour (MMBtu/hr).

The following conditions shall be applicable:

(1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuos opacity monitor in a six (6) hour period.

(2) Pursuant to 326 IAC 4-2-2(incinerators) shall meet the following:

(a) consist of primary and secondary chambers or the equivalent;

(b) be equipped with a primary burner unless burning wood products;

(c) comply with 326 IAC 5-1 and 326 IAC IAC 2;

(d) be maintained properly as specified by the manufacturer and approved by the commissioner;

(e) comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;

(f) be operated so that emissions of hazardous material including, but limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;

(g) not emit particulate matter in excess of five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty (50)percent excess air;

(h) not create a nuisance or a fire hazard.

If any of the above result, the burning shall be terminated immediately.

This exemption is the first air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

JKJ
cc: File - Porter County
Porter County Health Department
Air Compliance - Dave Sampias
Northwest Regional Office (NWRO)
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: **Angelcrest, Inc.**
Source Location: **104 Roosevelt Road, Valparaiso, Indiana 46383**
County: **Porter**
SIC Code: **7261**
Exemption No.: **127-11550-00092**
Permit Reviewer: **Janusz Johnson**

The Office of Air Management (OAM) has reviewed an application from Angelcrest, Inc., relating to the construction and operation of the following emission unit:

(a) One (1) crematory incinerator for human remains, maximum capacity of 100 pounds per hour, supplemented by natural gas fuel at a rate of 1.7 million British Thermal units per hour (MMBtu/hr).

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
#1	incinerator	18	1.7	2200	1200

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on November 12, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (1 page).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	1.5
PM-10	1.5
SO_2	0.5
VOC	0.7
CO	2.2
NO_x	0.7

(a) The potential to emit (as defined in 326 IAC 2-1.1-3) of carbon monoxide (CO) is less than 25 tons per year and the potential to emit of particulate matter (PM and PM10) is less than 5 tons per year. Therefore , the source is subject to the provisions of 326 IAC 2-5.1-1 (Exemptions).

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Porter County.

Pollutant	Status
PM-10	unclassifiable
SO_2	unclassifiable
NO_2	attainment
Ozone	severe
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Porter County has been designated as nonattainment for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Porter County has been classified as attainment or unclassifiable for all other regulated air pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)

PM	1.5
PM10	1.5
SO_2	0.5
VOC	0.7
CO	2.2
NO_x	0.7
Single HAP	0.0
Combination HAPs	0.0

(a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater, no severe nonattainment pollutant is emitted at a rate of 25 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2 and 2-3, and 40 CFR 52.21, the PSD and Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(i) This incinerator is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.50, Subpart (E)) because this incinerator has a charge capacity of 1.5 tons per day, which is less than 50 tons per day, for this rule to be applicable.

(ii) This crematory incinerator for human remains is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.50c, Subpart (Ec)) because human corpses are not considered hospital, medical or infectious waste.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

(i) This crematory incinerator for human remains is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 14 and 40 CFR part 63.1211, Subpart (EEE)) because human corpses are not considered hazardous waste.

State Rule Applicability

326 IAC 4-2-2 (Incinerators)

Pursuant to 326 IAC 4-2-2, the particulate matter emissions shall be limited to 0.5 pounds per 1,000 pounds of dry exhaust gas at standard conditions corrected to fifty percent(50%) excess air.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

Conclusion

The construction and operation of this crematory incinerator shall be subject to the conditions of the attached proposed **Exemption No. 127-11550-00092**.

Appendix A: Emissions Calculations
Industrial/Comercial Waste Combustor - Multiple Chamber
(50 - 4000 pounds per hour capacity)

Company Name: **Angelcrest, Inc.**
Address City IN Zip: **104 Roosevelt Road, Valparaiso, Indiana 46383**
CP: **127-11550**
Plt ID: **127-00092**
Reviewer: **Janusz Johnson**
Date: **December 21, 1999**

Potential Throughput

lb/hour	ton/yr
100.0	438.0

Pollutant

	PM	PM10	SO2	NOx	VOC *	CO
Emission Factor in lb/ton throughput	7.0	7.0	2.5	3.0	3.0	10.0
Potential Emissions in tons/yr	1.5	1.5	0.5	0.7	0.7	2.2

* conservatively based on TOC expressed as methane

Methodology
Emission Factors are from AP 42, Chapter 2.1, Table 2.1-12
Potential Throughput (tons/yr) = Potential Throughput (lb/hr) x 8,760 hrs/yr x 1 ton/2,000 lbs
Emissions (tons/yr) = Potential Throughput (tons/yr) x Emission Factor (lb/ton) / 2,000 lb/ton